

What is claimed is:

1. A door lock comprising:

a body;

a locking device installed in part of the body to lock and unlock an entrance

5 door and having a first handle provided at an inner side of the entrance door, a lock assembly engaged with the first handle when a normal key is inserted, and a locking member actuated by rotation of the first handle;

a first sensing device which becomes an ON state as the locking member protrudes outside the locking device and an OFF state as the protruded locking member retreats;

10 a speaker generating alarm when the first sensing device senses an intruder; and

a power portion supplying electric power to the first sensing device and the speaker,

15 wherein holes, through which the first handle and part of the first sensing device are exposed, are formed at an outer surface of the body, a cover is provided at a portion corresponding to the power portion, and the speaker is installed on the body so that sound is emitted out of the body.

20 2. The door lock as claimed in claim 1, wherein, in the locking device, the locking member penetrates the body to protrude in a selected direction of three directions of the body by rotation of the first handle.

25 3. The door lock as claimed in claim 1, wherein the first sensing device comprises a sensing portion which senses heat and an infrared ray radiated from an intruder and a movement of the intruder, and the sensing portion is exposed through a hole formed in an outer surface of the body.

30 4. The door lock as claimed in claim 1, wherein a remote controller having a through hole through which the locking member passes is installed at a side of the body where the locking member protrudes, the remote controller being in an ON state when the locking member passes through and remaining in the through hole and in an OFF state when the locking member does not exist in the through hole, in an opposite manner to that of the first sensing portion.

5. The door lock as claimed in claim 4, wherein at least one of a second sensing device and an alarm light apparatus operated by the remote controller is provided at a place remote from the remote controller.

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6. The door lock as claimed in claim 1, wherein a tact switch is provided at an inner side of the lock assembly where a key is inserted so that alarm is generated when a foreign material, not the key, is inserted and contacts the tact switch, and one of power lines connected to the tact switch is connected to the speaker via the locking device.

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7. The door lock as claimed in claim 4, wherein a tact switch is provided at an inner side of the lock assembly where a key is inserted so that alarm is generated when a foreign material, not the key, is inserted and contacts the tact switch, and one of power lines connected to the tact switch is connected to the speaker via the locking device.

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8. The door lock as claimed in claim 3, further comprising a switch turning on and off the first sensing device and provided on the first sensing device.

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9. The door lock as claimed in claim 1, wherein the body further comprises a main handle used to open and shut the entrance door.

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10. The door lock as claimed in claim 4, wherein the body further comprises a main handle used to open and shut the entrance door.

11. The door lock as claimed in claim 8, wherein the body further comprises a main handle used to open and shut the entrance door.

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12. The door lock as claimed in claim 5, wherein the second sensing device is provided at least one of a ceiling of the entrance door, a wall surface facing the entrance door, and a place facing a window.

13. The door lock as claimed in claim 12, wherein an alarm light portion generating alarming light when the second sensing device senses an intruder is provided in the second sensing device.

5 14. A door lock comprising:

a body;

10 a locking device installed in part of the body to lock and unlock an entrance door and having a first handle provided at an inner side of the entrance door, a lock assembly provided at an outer side of the entrance door and engaged with the first handle when a normal key is inserted, and a locking member actuated by rotation of the first handle;

15 a remote controller which becomes an ON state as the locking member protrudes outside the locking device and an OFF state as the protruded locking member retreats;

20 a speaker generating alarm when a foreign material, not a key, is inserted in the lock assembly;

a power portion supplying electric power to the remote controller and the speaker; and

25 a sensing device provided at a place remote from the remote controller and operated by the remote controller,

wherein holes, through which the first handle and part of the first sensing device are exposed, are formed at an outer surface of the body, a cover is provided at a portion corresponding to the power portion, and the speaker is installed on the body so that sound is dissipated out of the body.

25 15. The door lock as claimed in claim 14, further comprising an alarm light apparatus provided at a place remote from the remote controller and operated by the remote controller.

30 16. The door lock as claimed in claim 14, wherein the body further comprises a main handle used to open and shut the entrance door.

17. The door lock as claimed in claim 16, wherein the body further comprises a main handle used to open and shut the entrance door.